

IN THE CLAIMS

1. (currently amended) A transmitting diversity system with a base station transmitting signals from a plurality of antennas and performing diversity transmission according to feedback data transmitted from a mobile node receiving the signals, comprising:

 a signal condition detection unit detecting the condition of a signal transmitted from each of the plurality of antennas;

 an antenna selection unit selecting an antenna for which a control weight is calculated, from the plurality of antennas; and

 a control weight unit calculating only ~~a~~the control weight applied to the selected antenna and applying the control weight to signals transmitted from the selected antenna; and
 a switch unit routing input signals to each of the plurality of antennas and disconnecting the antenna, wherein

 said control weight unit fixes the control weight of an unselected antenna to a current value.

2. – 3. (canceled)

4. (currently amended) The transmitting diversity system according to claim 1, wherein said signal condition detection unit measures propagation loss, fading frequency or correlation coefficient between antennas of ~~an incoming~~the signal.

5. (original) The transmitting diversity system according to claim 1, wherein said signal condition detection unit is provided for the mobile node.

6. (original) The transmitting diversity system according to claim 1, wherein said signal condition detection unit is provided for the base station.

7. (currently amended) The transmitting diversity system according to claim 1, wherein

the plurality of antennas are provided for a plurality of base stations, and said antenna selection unit also selects ~~a~~the base station to communicate with by selecting an antenna with ~~a~~the controlled weight from the plurality of antennas and making possible a handover process accompanying the travel of each mobile node.

8. (currently amended) A transmitting diversity method with a base station transmitting signals from a plurality of antennas and performing diversity transmission according to feedback data transmitted from a mobile node receiving the signals, comprising the steps of:

detecting the condition of a signal transmitted from each of the plurality of antennas; selecting an antenna for which a control weight is calculated, from the plurality of antennas; and

calculating only ~~a~~the control weight applied to the selected antenna and applying the control weight to signals transmitted from the selected antenna; ~~and~~
~~routing input signals to each of the plurality of antennas and disconnecting the antenna (switch step), wherein~~

in the step of calculating and applying the control weight, the control weight of an unselected antenna is fixed to a current value.

9. – 10. (canceled)

11. (currently amended) The transmitting diversity method according to claim 8, wherein in the detecting step, propagation loss, fading frequency or correlation coefficient between antennas of ~~an incoming~~^{the} signal is measured.

12. (previously presented) The transmitting diversity method according to claim 8, wherein the detecting step is performed in the mobile node.

13. (previously presented) The transmitting diversity method according to claim 8, wherein the detecting step is performed in the base station.

14. (currently amended) The transmitting diversity method according to claim 8, wherein

the plurality of antennas are provided for a plurality of base stations, and in the selecting step, ~~a~~^{the} base station to communicate with is also selected by selecting an antenna with a controlled weight from the plurality of antennas and making possible a handover process accompanying the travel of ~~a~~^{the} mobile node.